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Stages in the Implementation of Innovative Clinical Programs in Complex Organizations

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Organizational processes can have an important impact on the introduction of innovative treatments into practice. Conceptual frameworks from organization theory and experiences implementing several hundred specialized mental health programs in the Department of Veterans Affairs (VA) over the past 15 years are used to illustrate stages and processes in the implementation of new treatment models. Four phases in the implementation of new treatments in complex organizational settings are described: a) the decision to implement, b) initial implementation, c) sustained implementation, and d) termination or transformation. Key strategies for moving research into practice include constructing decision-making coalitions, linking new initiatives to legitimate goals and values, quantitative monitoring of implementation and performance, and the development of self-sustaining communities of practice as well as learning organizations. Effective dissemination of new treatment methods requires different organizational strategies at different phases of implementation.

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In his preface to a recent report *Bridging Science and Service*, the Director of the National Institute of Mental Health expressed a concern, shared by many, that "too often clinical practices and service system innovations that are validated by research are not fully adopted in treatment settings" (National Advisory Mental Health Council, 1998), and several recent studies have shown that mental health services often fail to conform to "best practice" standards (Lehman et al., 1998; Young et al., 2001).

Since these concerns have been primarily voiced by researchers, it is not surprising that proposed solutions have largely involved modifying research designs. *Bridging Science and Service* recommended that future studies should be conducted under real-world conditions and should directly address translational processes that enhance their relevance for practitioners. A recent overview of progress in child and adolescent psychotherapy research identified similar problems and also urged modification of research methods to generate findings that would be more relevant to community practitioners (Weisz, 2000).

In a previous review, we proposed an alternative perspective on the research-to-practice gap that identified organizational processes as largely unaddressed barriers and potential bridges between research and practice (Rosenheck, in press). Building on the work of organizational researchers (March, 1994; March and Simon, 1958; Simon, 1997), we suggested that clinical decision making of health care providers is shaped to only a limited extent by scientific findings. Rather, practice is more influenced by organizational policies, procedures, and values along with established habits, routines, and resource configurations than by recent scientific findings. We identified four strategies that can facilitate the introduction of research treatments into real-world organizational settings: a) constructing decision-making coalitions to support particular innovations, b) linking new initiatives to legitimate organizational goals and values, c) monitoring implementation and ongoing performance using quantitative methods, and d) the developing of self-sustaining subcultures or communities of practice.

In the current study, we expand that framework by describing the role of these strategies across four distinct phases on the road from research to prac-

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tice: a) the decision to implement a new procedure or program, b) the initial implementation, c) sustained maintenance over extended periods of time, and d) termination or transformation. We thus seek to broaden the field of attention in dissemination studies and to track them over more extended periods of time.

Over the past 15 years, the Northeast Program Evaluation Center, an arm of the Mental Health Strategic Healthcare Group of the Department of Veterans Affairs (VA), has participated in the development and dissemination of over 500 VA programs for severely mentally ill veterans (Rosenheck and Neale, in press), for homeless veterans with mental illness (Rosenheck et al., 1992), and for veterans with war-related posttraumatic stress disorder (PTSD; Rosenheck and Fontana, 1999). In defining issues that are encountered in each phase of the dissemination process, we draw on relevant experiences with this broad range of programs.

The Decision to Implement

A Decision-Making Coalition

Innovation begins with a decision by an individual or group that a new treatment should be disseminated in their organization. Because in most situations no single proponent of an innovation can effect its adoption, by themselves, the first step in this process is a collective one in which a coalition of advocates argues, through various formal and informal channels, for a new treatment process or program. In our experience, the eventual outcome depends as much on the strength of the coalition, the resources it commands, and its persuasiveness, as on the quality of available scientific evidence.

It is important to distinguish the scientific rationale for implementing a new treatment from the decision to implement that treatment in a particular organization. The scientific rationale for a treatment is based on a small number of outcomes rigorously measured in a series of research studies, carefully designed to separate the impact of the intervention from other potentially confounding factors. By contrast, the decision to implement an intervention in a particular organization, is influenced by a much broader set of factors such as: a) the overall budgetary position of the organization (*i.e.*, whether it is expanding or contracting); b) the political power of the promoters of the intervention; c) the strength of the coalition they can activate in its support; d) the degree to which the intervention can be linked to *broad* organizational visions or agendas that have taken-for-granted legitimacy such as "excellence in health care value" or "health care second to none"; e) the degree to which the intervention can be linked to *narrower* legitimizing agendas, such as relying on evidence-based medicine or addressing the problems of highly publicized target populations like homeless veterans or Vietnam veterans; f) the extent to which *external* experts, stakeholders, and published reports are available to legitimize the intervention as "cutting edge," "state-of-the-art," or "standard" treatment; and, finally, g) the extent to which implementation of the intervention can be presented as a response to salient external criticisms. Political support and institutional legitimacy are thus promoting central implementation decisions, and there is serious risk that experienced clinicians will not be included in this phase of the implementation process.

The background to the decision to implement a new treatment or to start a new program is rarely described in research reports, even when it is central to their success. The Partners in Care (PIC) study, for example, was one of the most successful translational studies ever conducted in the mental health field (Wells et al., 2000). Forty-six primary care practices agreed to be randomly assigned to either continue their usual practice for treating depression or to implement special assessment and training programs that fostered provision of state-of-the art pharmacotherapy or psychotherapy. The results were impressive and showed that, in comparison with clinics that provided usual care, those that implemented new treatment protocols generated greater symptom reduction and improved job performances (Wells et al., 2000).

Impressive as these research findings are, perhaps the most impressive feature of this study was that it was conducted at all. Although Wells and his colleagues successfully persuaded 46 practices to agree to provide services through a structured research protocol, no mention is made of how and through whom the researchers obtained access to the practices, how they appealed to them to take on this project, and how or why the practices decided to participate. This study was not, of course, designed to examine these issues, yet they remain among its most impressive accomplishments and possibly among the most informative for translating research findings into practice.

Consistency with Organizational Objectives

One of the principle factors that can determine whether a new model is chosen for implementation is its consistency with larger organizational objectives. A study of the inpatient treatment of PTSD in

VA, for example, showed that traditional long-stay programs had no greater clinical effect than other programs but incurred $18,000 greater annual costs per patient (Fontana and Rosenheck, 1997). This was the first comparative study of these programs, and although most single studies have little impact on practice until they are replicated many times, this study appears to have stimulated widespread change in VA practice over the next few years, primarily because its conclusions were consistent with larger organizational goals to reduce inpatient utilization and to shift the emphasis of care to community-based services. Although there were 25 traditional programs and 21 alternative programs (half-way houses, day hospitals, or short-term units) in 1996 when the internal VA report on this study was circulated, there were only 7 traditional programs and 34 new model programs in 2000, just 4 years later (Fontana et al., 2000).

Crises as Windows of Opportunity

When an initiative is not fully consistent with organizational goals, externally generated crises may present windows of opportunity during which crucial support can be obtained. In 1987, an experimental demonstration project was implemented in one VA region that successfully demonstrated the cost-effectiveness of a modified version of Assertive Community Treatment in VA settings (Rosenheck and Neale, 1998a). In 1994, in part on the basis of these findings, additional funds were provided to develop training and monitoring procedures and to support expansion of the program to 30 more sites. Finally, in FY 2000, on the basis of evidence that this dissemination had been successful, a national directive was issued encouraging the general use of this model throughout the VA system.

Although the expansion of this initiative may seem like the natural unfolding of a national policy encouraging community-based mental health care (Rosenheck and Neale, in press), there was in fact considerable resistance to this model because of the substantial fixed costs associated with establishing a team (approximately $500,000/year) and because the requirement of low caseloads in this model ran counter to prevalent norms favoring higher outpatient caseloads to increase efficiency (Veterans Health Administration, 1997).

Each of the stages in the enactment of the initiative, however, represented a response to a more general crisis to which the initiative was offered as a proposed solution. The original demonstration, for example, was a response to anticipated budget cuts due to recently passed Graham-Rudman legislation. The translational expansion was mounted in response to criticisms of VA's treatment of veterans with severe mental illness at a Congressional hearing (Talbott, 1993), and the final policy directive was a response to recommendations of an independent VA committee, established by Congress, that voiced concern over reductions in VA's capacity to treat people with severe mental illness, contrary to statutory requirements (PL 104 to 262, Section 104; Committee on Care of Severely Chronically Mentally Ill Veterans, 2001; Veterans Health Administration, 2000).

Thus, although this program was not fully consistent with dominant organizational values, its implementation was effectively promoted through a series of crises or challenges, none of which explicitly demanded additional case management services, but all of which could be addressed, at least symbolically, by implementing this "solution." Research results, literature reviews, and clinical examples of how the program worked, it should be noted, were frequently cited throughout these processes but never received close study and did not themselves provide direct impetus for the initiative. ACT was one of many possible "solutions" that could have been put forth to respond to a loosely related set of crises. It was unique only in that its proponents were prepared to seize these windows of opportunity as they became available and to present both scientific and clinical evidence of its potential value.

Over and above their scientific rationale, the decision to implement a new treatment model: a) requires the support of a coalition of advocates; b) must be linked to legitimate internal or external values, or to solving a crisis; and c) is affected by organizational contingencies that are unpredictable, diverse, and typically unrelated to scientific evidence.

Initial Implementation

As described in the previous section, the successful implementation of an innovative treatment depends to a considerable degree on the specificity and depth of support behind the decision to implement. As James March put it, "Although ambiguities of meaning and expectation can increase support for a decision, they often lead to unpredictability in implementation" (March, 1994, p. 195). Thus, it is important that the initial political support is directed as well-specified initiatives and is sustained throughout the implementation phase.

Program Implementation vs. *Symbolic Action*

There is a tendency in the day-to-day operation of complex organizations to declare new programs im-

plemented merely because funds have been allocated or directives issued, even in the absence of objective evidence of implementation. As many scholars have observed, decisions in organizations are often used to symbolically communicate values, clarify intentions, or appease stakeholders, without subsequent allocation of resources or enforcement of regulations needed to implement those decisions (March, 1994; March and Olsen, 1976; Meyer and Rowan, 1977; Weick, 1995). Organizational budgets are often flexible, and, in the absence of detailed program definition or performance monitoring, funds allocated for a specific purpose at one level can be rechanneled toward other priorities further down the organizational chain. The larger the organization, the more distance between levels, the more difficult and costly it is to assure that decisions are followed by action. The recent emphasis on local control or devolution in government (Peterson, 1995) has been influential in VA as elsewhere (Kizer et al., 1997) and tends, in practice, to decouple broad organizational policy from local action. Central accountability is thereby reduced (Handler, 1996), reinforcing emphasis on symbols and rationalizations rather than actual changes in service delivery (Meyer 1986; Scott, 1986, 1998). Clinicians are often frustrated at the inconsistency they experience between words and deeds—an inconsistency that is more reflective of general processes in large organizations than of deliberate duplicity.

Program Specification and Implementation Assessment

The development of strategies for assuring successful implementation of innovative treatments is perhaps the area of dissemination practice that has been most fully developed by traditional researchers. There has been increasing emphasis in research in recent years on specifying in written manuals exactly how novel treatments are to be conducted (Allness and Knoedler, 1998; Carroll et al., 1994) and on verifying implementation through the use of assessment tools that quantify model fidelity (Teague et al., 1998).

These research tools are increasingly available for use in naturalistic program evaluation, allowing empirical documentation of the characteristics of clients served, the services that are delivered, and, where possible, the ensuing outcomes and costs of treatment (Neale et al., 2000; Rosenheck and Neale, in press). Use of such instruments, in itself, communicates concretely and directly to the clinical staff who use them, the kinds of clients they are expected to serve, the services to be delivered, and the desired outcomes. VA's Health Care for Homeless Veterans Program (HCHV), for example, has used such standardized evaluation procedures for over 15 years and now collects accountability data on over 30,000 veterans annually at over 100 sites across the country. The first evaluation report on the program was submitted to Congress less than 6 months after the first client was seen (Rosenheck et al., 1987) and was circulated to the Congress, sponsoring institutions, and to the new programs themselves. This report clearly defined the target population, intended service models, and targeted outcome domains.

Circulating Performance Data

Compilation and circulation of evaluation results is an essential part of the implementation process because it establishes an accountability loop through which local performance can be compared against wider program standards. In all of the specialized mental health programs monitored at the Northeast Program Evaluation Center, performance data from all sites are circulated, and sites whose performance deviates from program norms are asked to explain the reasons for their deviation in writing and to either justify these deviations or to identify a plan for remediating them (Kasprow et al., 2000; Seibyl et al., 2000). These feedback plans are included in annual program reports that are circulated to all program directors, to local and national VA administrators, and to the Congress (Fontana et al., 2000; Kasprow et al., 2000; Seibyl et al., 2000).

However, data by itself does not assure appropriate implementation. Face-to-face training is also an important support to program implementation because it allows observational learning of clinical methods that cannot be well conveyed in words, along with direct observation of service delivery with feedback from experienced experts (Mittman et al., 1992). In the 1994 VA ACT dissemination, experienced teams were paired with new teams as mentor-monitors to observe, support, and teach new treatment methods. Personal contact fosters identification with the program and initiates the eventual development of a self-sustaining program-wide subculture or community of practice (Aldrich, 1999). Clinician-to-clinician interaction is often the best mode of education.

The Hazards of Poor Implementation

Although there are substantial costs to real-time program evaluation, quantitative performance monitoring, and face-to-face learning, in the absence of such activities, there is substantial risk that new

programs will bear little resemblance to empirically tested models and that the usual processes of retrospective self-justification will prevent eventual detection of their ineffective performance (Weick, 1995). Weakly implemented programs consume the same resources as strongly implemented programs but reduce staff morale and bring little or no benefit to clients. Using a rigorous experimental design, the previously mentioned VA ACT demonstration showed that programs that diluted the original model showed increased, rather than decreased, hospital utilization and costs, an outcome that was opposite to what was intended (Rosenheck et al., 1995). In cases of unmonitored real-world practice, the continued realization of such undesirable goals could not be detected and would result in continued waste.

Implementation decisions sometimes result in little more than symbolic action with inappropriate use of resources and little benefit to clients. Effective implementation requires: a) clear, well-specified implementation decision with commitment of appropriate resources; b) operational definition of the target population, service delivery strategies, and intended outcomes; and c) objective monitoring and enforcement of adherence to program design.

Sustained Maintenance and Development

Although research studies rarely follow individual clients for more than 2 or 3 years (Drake et al., 1998; Rosenheck and Neale, 1998b; Test et al., 1989), innovative service programs are typically implemented with the expectation that they will continue indefinitely. Little consideration, however, has been given to the process of maintaining, modifying, and revitalizing such programs over the long haul. The challenges of program implementation, described above, are compounded by the passage of time as the newness of the intervention fades, leadership changes, and other items become prominent on the organizational agenda. The risk of slippage in program fidelity arises from both the individual program and the broader service system.

Slippage at the Program Level

At the level of individual programs specific impediments to maintaining fidelity include: a) reduced investment in the model by clinical staff as a result of changing professional interests and competing personal ambitions; b) difficulties recruiting staff with appropriate experience and motivation; c) lack of access or attention to data on model fidelity; d) a lack of means to enforce adherence to the model, even if fidelity data are available, and e) reduced staffing due to budget constraints (which become increasingly likely the longer a program is in operation).

Slippage at the Facility Level

At higher organizational levels, administrators who are initially enthusiastic about new initiatives may later enforce adherence to other legitimate but conflicting organizational goals. Programs targeted at reaching out to homeless clients living in the community, for example, have sometimes been tasked with facilitating the discharge of long-stay inpatients who represent a fiscal liability under VA's capitation financing system, or with generating "new workload" by seeing large numbers of patients briefly, at the expense of providing the sustained case management services that are needed to achieve stable community placements. Similarly, the high staff-to-patient ratios essential to the ACT model are often looked on with suspicion once caseloads are filled. Efforts of such programs may become increasingly invisible if they are successful at keeping severely ill patients out of the hospital by providing services in the community, out of view by general clinical staff and administrators.

Slippage at the System Level

At the level of the overall service system, erosion of fidelity can result from each of the three characteristics of complex organizations described previously (Rosenheck, in press). Competing organizational goals can crowd out support for new programs, the manifest uncertainty of the technology can lead to disenchantment and changes in practice, and both changing leadership and unanticipated external demands can result in redefinition of program objectives and operating principles. When a new VA Undersecretary for Health set a goal that all VA patients should be assigned to a primary care provider (Kizer, 1999), specialized programs for veterans with severe mental illness were jeopardized both because some staff members were reassigned to primary care services and because they were encouraged to focus on less specialized clinical populations in keeping with the more general devaluation of "stovepipe" specialization.

Maintaining Support Across Levels

Efforts to sustain innovative programs require continued support from multiple levels. At the highest level of VA, for example, specialized programs received an important boost when Congress passed a law specifically requiring VA to maintain its capac-

ity to provide specialized services to veterans with disabling mental illness (Public law 104 to 262, Section 104). At an intermediate level, a national council of network homeless coordinators was established with representatives from each VA region. This body assured that the importance of these programs at the national level would be articulated to local administrators and that local concerns could be heard at the national level. In a similarly integrative effort, both mental health experts and representatives of the larger VA system were involved in formulating the national directive encouraging expansion of VA's intensive case management program. Obtaining "buy-in" from general medical administrators provided an important source of legitimacy and support for a resource intensive innovation.

Maintaining Fidelity

Two interrelated approaches to maintaining model fidelity over extended periods of time are a) continued quantitative performance monitoring and enforcement of standards and b) building a self-sustaining program subculture.

Performance Monitoring. Quantitative performance monitoring represents a continuation of the fidelity monitoring described in the discussion of initial implementation and relies on both the collection of client-level service delivery data over extended periods of time and on willingness to use those data to enforce program performance standards.

VA's homeless outreach program has been monitored over the past 14 years to maintain a focus on outreach to truly homeless veterans, provision of residential treatment to the extent funds allow, and facilitating exit from homelessness. Comparison of data from the first 10,000 veterans seen in the program in 1987–88 with data on approximately 34,000 veterans seen over a decade later, in FY 2000, shows sustained achievement of these core objectives. During the early years of program operation, 55% of all veterans were contacted through community outreach, 75% had been homeless for more than 1 month, and 70% of the budget went to community-based residential treatment (Rosenheck et al., 1987). In FY 2000, 63% of all veterans were contacted through community outreach, 73% had been homeless for more than 1 month, and 45% of the budget went to community-based residential treatment (Kasprow et al., 2000). Housing outcomes had improved modestly over the years with 34% independently housed in FY 2000, as compared with 25% in 1987–88; 37% going to lower intensity residential programs in FY 2000, as compared with 28% in 1987–88; and only 29% homeless or with unknown housing status in FY 2000, as compared with 48% in 1987–88. Although cold statistics are removed from clinical practice many clinicians have learned to use these statistics both administratively and clinically.

Enforcement of standards. Although monitoring data have been collected continuously over the 14 years of program operation, enforcement of standards has varied substantially with changes in VA policy and priorities. During the early years, designated program funds were officially fenced to prevent diversion to other purposes. However, as VA shifted its focus after 1995 to the development of primary care services, to improving efficiency, and to local administrative control, support for special programs became secondary to other priorities. While monitoring continued, funds were no longer protected, and enforcement was left to local facilities. Evidence of program erosion in some areas, however, and the development of integrated infrastructures of support as described above, subsequently revived interest in this aspect of VA's mission with support from both advocacy groups and VA leaders in subsequent years.

Subculture Development: Communities of Practice and the Learning Organization. Perhaps more important than monitoring and enforcement of program standards, in the long term, is the development of a self-sustaining program identity or subculture among participating staff. As experiences and challenges are shared, a community of practice develops based on "the patterned social interaction between members that sustains organizational knowledge and facilitates its reproduction" (Aldrich, 1999, p. 141). The key to developing such a community of practice is frequent interaction and sharing of experiences *among practicing clinicians.* Such interactions allow members to make sense of their common experience and to codify in catch-phrases, symbols, and stories their accrued experience and knowledge (Weick, 1995). The staff of VA's intensive case management programs have been encouraged to meet daily to review cases and procedures, and staff of both specialized PTSD programs and homeless outreach programs are expected to share common office space, to have integrated leadership, and frequent team meetings. Programs at different facilities have been knit together by a series of training conferences over the years, by weekly conference calls during the start-up periods, and by monthly calls subsequently, and these activities have now continued for over 10 years, supporting an increasingly institutionalized program culture. Joint participation in national evaluation and monitoring efforts also contributes to maintenance of program cohesiveness as data reflecting the performance of each

program, as well as national trends, are circulated and discussed over the years, along with recent research findings of direct practical relevance.

Somewhat paradoxically, programs are more likely to institutionalize their use of standard models if they make local modifications that foster a sense of uniqueness and ownership (DiBella, 2001). As programs move beyond the initial implementation, their relationship with the central/national implementation team changes. Although there is general willingness to accept central direction during the early period of program initiation, as clinical staff become skilled and experienced in delivering services, they increasingly have their own perspectives about ways to improve the program or modify it to suit local circumstances. It is sometimes difficult to distinguish between program erosion, the major hazard of long-term operation, described previously, and creative program modification and internalization by experienced clinicians.

An evolving community, or communities, of practice may eventually generate treatment activities that modify, reconfigure, or even replace previously disseminated program elements. As described above, a broad array of residential and outpatient programs replaced the traditional long-term inpatient PTSD programs in the early 1990s (Rosenheck and Fontana, 1999). As originally disseminated, residential and outpatient programs were defined as separate initiatives with separate evaluation paradigms and administrative structures. However, after a few years, sites began to integrate their inpatient and outpatient PTSD programs, using creative mixtures of staff assignments, to offer a fuller continuum of care with an integrated staff and coordinated leadership. This development emerged from the logic of field-based experience, was reinforced by shared experience, and spread through what had become a "learning community" of VA PTSD programs (DiBella, 2001; Senge, 1990). With less and less shaping from headquarters staff, program guidance comes increasingly from the teams themselves.

A second example of program evolution based in a learning community involves the performance assessment of VA-sponsored residential treatment programs for homeless veterans. During the first 12 years these programs were in operation, a key outcome indicator was the proportion of veterans independently housed at the end of an episode of residential treatment. However, as VA fostered the development of an extended array of residential treatment programs of different intensities, field staff increasingly felt that this measure did not recognize an evolving practice of transferring clients to less intensive, and less expensive, residential programs operating within a tightly integrated continuum of care. After discussions on national conference calls and in face-to-face leadership meetings, both the national formulation of the program's design and the specific performance measures were accordingly modified to fit better with front-line clinical experience.

The ultimate, if typically unstated, goal of implementing evidence-based practices is sustained effectiveness. Continued performance monitoring with enforcement of standards can prevent erosion and eventually supports the emergence of a subculture based in a socially reinforced community of practice out of which a learning organization can develop that uses empirical performance data to improve the basic model. However, as programs claim ownership of their efforts, the distinction between erosion of performance standards, and the development of creative, experience-based innovation becomes difficult to make and may result in considerable ambiguity in the final evaluation of program development (March, 1999). Attention to these processes will become increasingly important as evidence-based practice becomes more widespread and as innovative models, deployed for extended periods of time, are increasingly subject to local modification.

Transformation/Termination

Although the goal of most dissemination efforts is sustained program operation, both internal and external developments can result in either a major transformation of an intervention or its termination. It is remarkable that, with the increased emphasis on accountability and evidence-based medicine in recent years, so little consideration has been given to the phasing out of ineffective treatments and programs and to the special difficulties and resistances such efforts are likely to encounter. We will describe three processes through which programs have been transformed or closed, which primarily represent extensions of processes discussed previously.

Subordination to Other Organizational Objectives

The most common route to program closure results from subordination of the original goals to other organizational objectives. In several instances, ACT team caseloads have become so large due to pressures to increase efficiency that clinicians no longer have time to provide community-based care and find themselves delivering services that are virtually indistinguishable from those of a standard outpatient clinic. Similarly, as a result of the growing emphasis on primary care, some specialized PTSD

teams were broken up, and staff were reassigned to general clinics. Perhaps the most dramatic change in any VA program in recent years has been the virtually complete elimination of inpatient substance abuse treatment programs. Although researchers had questioned the value of such treatment for many years (Miller and Hester, 1986), the 94% decline in bed capacity from 3716 substance abuse beds in FY 1994 to 233 beds in FY 2000 (Rosenheck et al., 2001) was never explicitly linked to research findings but rather seems to have developed in response to the more general policy of improving efficiency (Chen et al., 2001).

Transformation through Elaboration of Specific Elements

Most major program transformations are not precipitous but rather result from the gradual expansion of selected program elements at the expense of others. VA's Health Care for Homeless Veterans program, for example, initially emphasized community outreach, case management, and time-limited residential treatment through contracts with community providers. In some locations, particularly where housing was expensive and difficult to obtain, partnerships with community residential providers resulted in joint grant submissions and the development of an extensive continuum of residential care, from shelter beds, through transitional residential treatment, to permanent supported housing. In these programs, the initial emphasis on providing clinical services was augmented with a parallel focus on partnership-based community development.

Program Closure for Lack of Merit

Perhaps the most painful reason for program closure is a determination that its cost-effectiveness does not merit continued operation. When an internal VA study showed traditional long-stay PTSD treatment was less cost-effective than recently developed alternatives (Fontana and Rosenheck, 1997), some of these programs were gradually transformed to other models, but others were closed. As one might expect, the closing or reconfiguring of programs is associated with heated controversy and demoralization among their adherents because both cherished ideas and control of resources are challenged.

Although program transformation, replacement, or closure can sometimes be justified by evolving research findings or local evaluation results, such data are not typically invoked as reasons for change. Rather the causes of program demise are closely related to those organizational processes that we have identified as responsible for the initial implementation decision. Programs close when they have lost the support of a coalition of leaders, or present an obstacle to the ambitions of a new coalition, and/or when they are no longer linked to legitimizing organizational values or priorities. The decision to phase out a program is occasionally influenced by poor local performance data, but in these cases, the poor performance has most often been preceded by erosion due to lack of local support.

Conclusion: Interrelation of Implementation Phase and Implementation Process

This study described four phases in the implementation of new treatments in complex organizational settings: a) the decision to implement, b) initial implementation, c) sustained implementation, and d) termination or transformation. We also described four strategies that are of central importance across these phases: a) developing coalitions that favor implementation and provide ongoing support, b) linking initiatives to legitimate organizational goals and values or to the solution of organizational crises, c) quantitative monitoring of model fidelity and program performance and circulating the results to all relevant parties, and d) development of self-sustaining subcultures or communities of practice. The relationship of these phases and processes to one another is presented in Table 1.

Although the first two processes (coalition building and establishing legitimacy) are of paramount importance during the first implementation phase

TABLE 1
Relationship between Phases of Implementation and Supporting Organizational Strategies

Process	Implementation Strategies			
	Decision to Implement	Initial Implementation	Sustained Implementation	Term/Transform
Coalition building	+++	++	++	−−−
Legitimacy linking	+++	++	++	−−−
Performance monitoring	0	+++	++	−
Developing program subculture: community of practice	0	+	+++	−−

(the decision to implement), they remain important in each of the three subsequent phases, including the process of termination or transformation, albeit by their absence.

In our experience, the third process, quantitative performance monitoring, is of greatest importance in the phase of initial implementation but remains important, although less central, to sustained program implementation. During this phase, the development of a program-specific subculture, embodied in clinical communities of practice, plays an increasingly growing role.

Although performance monitoring could potentially play an important role in the last phase, program transformation or termination, it typically has not, at least in our experience. The development of a program subculture or community of practice is of greatest importance to sustaining the program, whereas the development of a learning community can either strengthen or transform the program.

Although the existence of a strong subculture favoring the program can make its demise exceptionally distressing to clinical staff, such cultures have not generally influenced termination decisions, in our experience; termination has largely hinged on their relationship to a supportive coalition of decision makers and alignment with institutional values and priorities.

Effective dissemination of new treatment methods involves varying forms of engagement with organizational processes at different phases of implementation. Sustained engagement with phase-specific activities is necessary to sustain program performance and quality of care.

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